

HBUS End of Line Module

The Gallagher HBUS ELM works to protect important systems by monitoring communications between alarm sensors and controller technology, regular heartbeats ensure alarms are raised in the event of an attack on the integrity of the network.

Gallagher HBUS End Of Line Module

The Gallagher End of Line Module (ELM) is a small PCB encapsulated in a protective potting resin and plastic casing, with a unique HBUS device serial number.

The module plastic measures 32mm x 17mm x 10mm, and is designed to fit inside the tamper-proofed housing of a high grade alarm sensing device (i.e. PIR, contact sensor), or in a tamper-proofed junction box. Benefits of the Gallagher ELM are shown below:

Compliance

Where AS/NZS 2201 Class 5 intruder alarm compliance is required, Gallagher Command Centre combined with the Gallagher HBUS ELM form part of a compliant installation.

Security

The HBUS ELM delivers full end-to-end authentication and encryption for a site's security system by securing a weak link in most security systems (non-authenticated sensor inputs communicating unencrypted with controllers).

The ELM sends regular heartbeats, ensuring that alarms are raised if communications with the ELM are severed.

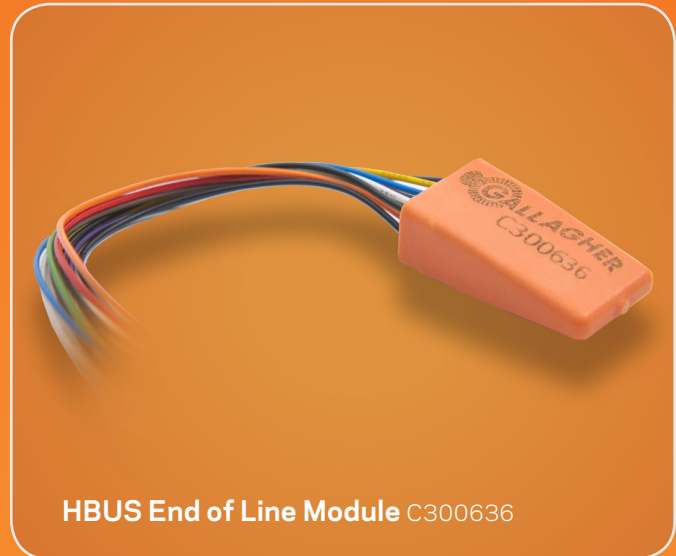
Ease of installation

The HBUS ELM's small form factor makes it easy to install into an existing sensor device or tamperproofed junction box, with support for sensor walk-test functionality removing the need to run additional wiring.

Leveraging HBUS device flexibility, the sensors can be daisy chained back to the Controller 6000 HS PIV or star wired back to the controller's 8H or 4H HBUS Module, allowing re-use of existing site wiring.

HBUS benefits

Delivering all the benefits of HBUS devices, the HBUS ELM has field upgradeable code to improve longevity of device, has plug and play authentication for quick and secure installation, end-to-end encryption, and multiple device support on the same wiring run (up to 30 modules per controller).



HBUS End of Line Module C300636

Why do I need an HBUS ELM?

High value and sensitive assets are normally protected by intruder alarm systems, using 3-4 state analogue monitoring to detect sensor tampering.

Without an HBUS ELM, advanced attack methods can defeat these detection methods, rendering your high value assets unprotected.

The HBUS ELM uses the latest digital encryption security standards to protect against all known vulnerabilities, ensuring alarms are always reported should your sensors come under attack.

Prerequisites

Command Centre v7.50.530 (and greater) is required to support the HBUS ELM. The Controller 6000 HS PIV is required for communication with the HBUS ELM.



Encrypted communications

The unit operates as a configurable HBUS device, allowing the module to authenticate with the controller and establish encrypted communications. In addition to standard HBUS functionality, the module sends heartbeats on a regular basis, to ensure the module remains communicative with the controller.

Physical input connections

The HBUS ELM supports the following physical input connections with the sensor:

- Alarm contact – alerts the system that the sensor has detected a potential alarm condition (e.g. a PIR detecting someone walking in front of it)
- Tamper contact - alerts the system that the sensor has been tampered (e.g. someone has removed the sensor tamper-proof cover to gain access to the sensor or end-of-line module)
- Anti-masking contact - Alerts the system that an attempt has been made to mask the sensor (e.g. someone covering a PIR when the area is disarmed). This is available for sensor devices that have an anti-mask output that can be directly wired into the ELM.

Walk-test output

The HBUS ELM also supports a dedicated walk-test output, which eliminates the need for separate cabling to support walk-test functionality on a sensor. The walk-test output has been integrated into standard Command Centre test mode functionality, is supported on the T20 Terminal, and is compatible with specific requirements of high grade alarm sensors.

Licensing and version support

The HBUS End of Line Module is a non-licensed product, supported in Command Centre build v7.50.530 and Controller build vGR7.50//b144 onwards. A Controller 6000 HS PIV Controller is required to communicate with the HBUS ELM, due to the high security communications elements associated with the ELM.

AS/NZS Intruder Alarms Standard

AS/NZS 2201 comprises a series of Intruder Alarms standards which include mandatory, optional and advisory specifications applicable to all elements of an intruder alarm system.

The objective of the standard is to assist insurers, alarm companies, equipment manufacturers, clients and the police in achieving a complete and accurate statement for an intruder alarm system required in particular premises.

The standard classifies alarm system equipment functionality and performance, from Class 1 (lowest security level) to Class 5 (highest security level). As part of Gallagher’s Class 5 Solution, the HBUS ELM complies to all equipment requirements specified for Class 5 compliant alarm system installations.

Technical Specifications

Product numbers

C300636 HBUS End Of Line Module

Class 5 ELM

Product detail	Maximum # of ELM's per HBUS circuit: 30	
	Maximum # of ELM's per C6000 HS PIV Controller: 30	
Power	Current:	15mA
Environmental limits	Operating temperature:	-10°C to +70°C
	Humidity:	95% non-condensing
Communications	RS485 at 1Mb/s	
Standards compliance	CE, C-Tick, EN50130-4, EN55022 (EMC), AS/NZS 2201	
Dimensions	Height x Width x Depth:	32 x 17 x 10mm (1.26 x 0.67 x 0.4in)

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